Abstract

A method for pressure-independent temperature determination using a metal diaphragm (1) is described. A bridge circuit (5) having multiple resistors (6, 7, 8, 9) is provided on this diaphragm. One pair (10) of resistors (6, 7, 8, 9) is near the center and another pair (11) of resistors (6, 7, 8, 9) is situated at a distance from the center. The resistors (6, 7, 8, 9) are provided on the metal diaphragm in such a way that the tensile elongation (Δl) of the pair (10) of resistors (6, 7, 8, 9) near the center corresponds in absolute value to compressions $-\Delta l$ of the pair (11) of resistors (6, 7, 8, 9) far from the center.

(Figure 2)